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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/614,395

07/03/2003

Shane S. Taylor

58232/A647

5914

23363 7590 07/06/2009  
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EXAMINER

SCHNEIDER, CRAIG M

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

07/06/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/614,395	<b>Applicant(s)</b> TAYLOR ET AL.	
	<b>Examiner</b> CRAIG M. SCHNEIDER	<b>Art Unit</b> 3753	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 66 and 97-103 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 66 and 97-103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/8/08 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. The finality of the office action dated 3/16/09 has been vacated.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 97 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The negative limitation “not aligned to the inlet opening” is not supported in the originally filed specification and therefore is considered new matter.
4. Claims 100 and 101 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The negative limitation “the biasing element does not include a spring” is not supported in the originally filed specification and therefore is considered new matter.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 100 and 101 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 100 discloses that the biasing element is does not include a spring but in claim 101 the biasing element is in a high stress condition in the second position which would be indicative of a spring therefore the claims are contradictory and indefinite.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 66, 97-99, and 101-103 are rejected as understood under 35 U.S.C. 103(a) as being unpatentable over Contreras (4,015,630) in view of Schuler (5,685,297) and in further view of Dey (3,426,790) and further in view of Hershman (2,725,072).

Contreras discloses a regulator device configured to reduce the gas pressure of a source of pressurized breathable gas in a self contained underwater breathing apparatus comprising a regulator housing (10); a gas inlet opening (11 where 16 branches off) located within a bore in the regulator housing; a gas valve comprising a housing possessing an inlet opening (area that 11 is pointing to in Figure 1) and an exit opening (area that is right before the gas inlet opening); a passageway (area after 11 and right before the branch leading to 16) extending downstream of the inlet opening, a moveable cover member (12a) adapted to cover the inlet opening of the gas valve, the moveable cover member having a range of motion between a first position wherein the moveable cover member covers the inlet opening and a second position outside of the

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passageway wherein the moveable cover member is displaced from the inlet opening as seen in Figure 1, the moveable cover member being biased towards the first position (12 and 13 screws the cover into place therefore it is biased into the first position); and the gas outlet opening of the gas valve is in fluid communication with the gas inlet opening of the first stage regulator (col. 2, lines 4-21). Contreras fails to disclose a filter located within the passageway so that fluid must pass through the filter to pass through the exit opening, a retainer for removably securing the filter within the exit opening of the passageway, and the housing of the gas valve includes a portion threaded into the bore of the regulator housing and wherein the moveable cover member is adapted to automatically move from the second position to the first position when the valve is disconnected from a source of compressed gas. Schuler discloses a gas valve (the device that encloses 20 and that is threaded into housing 12) comprising a housing possessing an inlet opening (area below 20 away from 12) and an exit opening (area that the gas valve enters 12); a passageway (the passage through the gas valve) extending downstream of the inlet opening and a filter (20) located within the passageway so that fluid must pass through the filter to pass through the exit opening, and the housing of the gas valve includes a portion threaded (area that the gas valve meets 12) into the bore of the regulator housing (col. 3, lines 43-50). Schuler fails to disclose that a retainer for removably securing the filter within the exit opening of the passageway is used. Dey discloses a retainer (32) for removably securing the filter within the passageway (col. 2, lines 56-60). Hershman discloses the use of spring (41)

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assisted closing devices (40) to cover up a passageway (23)(col. 2, line 20 to col. 3, line 47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a removable gas valve as disclosed by Schuler with the device of Contreras, in order to easily replace the gas valve.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a removable retainer with the filter as disclosed by Dey with the filter of Contreras as modified by Schuler, in order to be able to replace the filter as needed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the idea of a spring assisted closing device as disclosed by Hershman in place of the closing device of Contreras in view of Schuler and Dey, to protect the innards of the valve when not in use.

Regarding claim 97, Hershman utilizes a biasing element (41) which is offset from the inlet as seen in Figure 1 and therefore is not aligned with the inlet opening and further is attached to the housing as seen in Figure 1.

Regarding claim 98, the Hershman biasing element would continuously bias the moveable cover member to the first position and be in continuous contact with the movable cover member.

Regarding claims 99 and 100 as understood, the biasing element comprises a spring hinge and a resilient arm (31) coupling the movable cover member to an attachment member (30) as seen in Figures 1 and 2.

Regarding claim 101, the resilient arm of Hershman would be in a low stress condition with the moveable cover member being in the first position and a high stress condition with the moveable cover member being in the second position.

Regarding claims 102 and 103, the valve further comprising a screw member (13) threadably connected to the housing and attached to a hand knob (12), the screw member being distal from the moveable cover member with the moveable cover member being in and biased into the first position. The spring assisted closure device of Hershman would allow the screw member to be distal from the moveable cover member when the moveable cover member is biased into the first position; therefore the functional limitation would be met.

### ***Response to Arguments***

Applicant's arguments filed 6/16/09 have been fully considered but they are not persuasive. The applicant is arguing that the above rejection does not meet the claim language of "a retainer device for removably securing the filter within the exit opening of the passageway". The examiner would like to point out that the filter of Schuler is just as much in the exit opening as is the applicant's filter, since applicant's exit opening is at the very end of the flow passage which also does not include a filter. The applicant is further reiterating numerous arguments in regards to the Hershman reference in which the examiner has addressed in the Final Office Action dated 3/16/09. The applicant is arguing that the examiner has not identified certain structural elements in the dependent claims. The examiner has addressed these structural elements in the above action.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRAIG M. SCHNEIDER whose telephone number is (571)272-3607. The examiner can normally be reached on M-F 8:00 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. M. S./  
Examiner, Art Unit 3753  
June 22, 2009

/Gregory L. Huson/  
Supervisory Patent Examiner, Art  
Unit 3751